

26. (New) The clamping tool of claim 25, wherein the third swivel connection and the sixth swivel connection coincide.

27. (New) The clamping tool of claim 25, wherein the sixth swivel connection is located on the rocking bar between the second swivel connection and the third swivel connection.

28. (New) The clamping tool of claim 19, wherein the first joint of the first and second toggle joints has a substantially U-shaped cross-section.

BB
Concluded

REMARKS

Claims 1-8, 10-13, and 19-28 appear in the application for the Examiner's review and consideration. Claim 11 has been amended to correct a typographical error in the term "rocking bar." Claims 14-18 have been canceled and replaced with new claims 19-28 to broaden the scope of the invention and to ensure adequate coverage for all of the embodiments disclosed in the specification. More specifically, claims 19-28 are intended to cover an embodiment of the invention where the first and second toggle joints do not pass their respective dead point positions simultaneously when the bar system is moved from a first, unlocked position to a second, locked position. Claims 19-28 also recite that the clamping member exerts a first clamping force and a second clamping force when the first and second toggle joints assume their respective dead point positions, and the first clamping force is applied before the second clamping force. This feature of claims 19-28 is not disclosed in any of the prior art of record. As the amendments and new claims do not introduce any new matter, their entry at this time is warranted.

Applicant respectfully submits that all pending claims comply with the requirements of 35 U.S.C. §112 and are allowable over the cited references, whether taken singly or in combination. Accordingly, this application is now in condition for allowance, early notice of which would be appreciated. Should the Examiner not agree that all claims are allowable, then a personal or telephonic interview is respectfully requested to discuss any remaining issues and to accelerate the allowance of the above-identified application.

A fee transmittal sheet is attached for the presentation of two (2) additional dependent claims. Should any other fees be required, please charge such fees to Pennie & Edmonds LLP deposit account no. 16-1150.

Respectfully submitted,

Date: August 27, 2002

By:

Marcia H. Sundein
Marcia H. Sundein

(Reg. No. 30,893)
Steven J. Schwarz
Steven J. Schwarz

(Reg. No. 47,070)

PENNIE and EDMONDS LLP
1667 K Street, N.W.
Washington, D.C. 20006
(202) 496-4400

APPENDIX A: MARKED-UP CLAIMS

The changes made to the claims are illustrated below, with brackets surrounding deleted text, and with added text underlined.

11. (Twice Amended) A clamping tool comprising:
 - a base member;
 - a bar system mounted to the base member and comprising a plurality of mutually pivotal bars including:
 - an activation bar pivotally mounted to the base member and being provided with a handle member;
 - a [racking] rocking bar also pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint; a clamping bar operatively connected to the activation bar via a second toggle joint and being pivotally mounted to said [racking] rocking bar;
 - wherein the first and second toggle joints substantially simultaneously assume respective dead point positions, when the bar system is moved from a first, unlock position to a second, locked position, and the first and second toggle joints form an angle with respect to one another when in the dead point positions.

APPENDIX B: COMPLETE SET OF CURRENTLY PENDING CLAIMS

The following is a complete listing of the currently pending claims in this application, reflecting the amendments made herein.

1. A clamping tool for clamping a workpiece to a support by means of a bar system constructed of a number of mutually pivotal bars and comprising an activation bar for making the bars pivot mutually between an initial position and a locking position, a clamping bar having at least one thrust shoe for pressing against the workpiece in the locking position, and a base for mounting the bar system on the support, wherein the bar system furthermore comprises at least two toggle joints arranged to substantially simultaneously assume a dead point position when the bar system is taken from the initial position to the locking position, and further wherein said two toggle joints form an angle with each other in the dead point positions.
2. The clamping tool according to claim 1, wherein the two joints of each toggle joint together form an angle that points its point in the opposite direction of the at least one clamp shoe in the initial position of the bar system.
3. The clamping tool according to claim 1, wherein the two joints and respectively of each toggle joint together form an angle that point its point in a direction towards the at least one clamp shoe in the locking position of the bar system.
4. The clamping tool according to claim 3, wherein the angle that the two joints of each toggle joint form together in the locking position of the bar system is between about 175° and about 180°.
5. The clamping tool according to claim 1, wherein the bar system comprises:
a first swivel connection for pivotally journaling a first end of the activation bar in the base while a second end of the activation bar is free and serves as handle for the clamping tool;
a rocking bar which at a first end is pivotally journaled in the base via a second swivel connection which is nearer the at least one clamp shoe than the first swivel connection and at a second end is pivotally journaled in the clamping bar via a third swivel connection;

a first toggle joint having a first joint which at a first end is pivotally journaled in the clamping bar via a fourth swivel connection which is farther from the at least one clamp shoe than the third swivel connection, and at a second end is pivotally journaled in the activation bar via a fifth swivel connection, and a second joint consisting of the part of the activation bar that is extending from the fifth to the first swivel connection; and

a second toggle joint having a first joint which at a first end is pivotally journaled in one of the group consisting of the rocking bar and the clamping bar via a sixth swivel connection, and at a second end is pivotally journaled in the activation bar via a seventh swivel connection which in the locking position of the clamping tool is nearer the at least one clamp shoe than the first and the fifth swivel connection, and a second joint consisting of the part of the activation bar that is extending between the seventh and the first swivel connection.

6. The clamping tool according to claim 5, wherein the third and the sixth swivel connection coincide.

7. The clamping tool according to claim 5, wherein the sixth swivel connection is placed on the rocking bar between the second and the third swivel connection.

8. The clamping tool according to claim 1, wherein the first and the second toggle joint pass the dead point positions simultaneously when the bar system is taken from its initial position to its locking position.

10. The clamping tool according to claim 1, wherein the first joint of the first and second toggle joint respectively is shaped as a U having a bottom and two sides.

11. (Twice Amended) A clamping tool comprising:
a base member;
a bar system mounted to the base member and comprising a plurality of mutually pivotal bars including:
an activation bar pivotally mounted to the base member and being provided with a handle member;

a rocking bar also pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint; a clamping bar operatively connected to the activation bar via a second toggle joint and being pivotally mounted to said rocking bar;

wherein the first and second toggle joints substantially simultaneously assume respective dead point positions, when the bar system is moved from a first, unlock position to a second, locked position, and the first and second toggle joints form an angle with respect to one another when in the dead point positions.

12. The clamping tool according to claim 11, further comprising first and second clamping surfaces formed on the clamping member, said first and second clamping surfaces being directed substantially perpendicular to one another.

13. The clamping tool according to claim 12, further comprising first and second screws engaged to said clamping member wherein a first clamping surface is formed on said first screw and said second clamping surface is formed on said second screw.

19. (New) A clamping tool comprising:

a base member;

a bar system including a plurality of mutually pivotal bars mounted to the base member, including:

an activation bar pivotally mounted to the base member;

a rocking bar pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint;

a clamping member operatively connected to the activation bar via a second toggle joint and pivotally mounted to the rocking bar;

wherein the first and second toggle joints do not pass their respective dead point positions simultaneously when the bar system is moved from a first, unlocked position to a second, locked position;

further wherein the clamping member exerts a first clamping force and a second clamping force when the first and second toggle joints assume their respective dead point positions, and the first clamping force is applied before the second clamping force.

20. (New) The clamping tool of claim 19, wherein the first clamping force is substantially transverse to the second clamping force.

21. (New) The clamping tool of claim 19, further comprising first and second clamping surfaces formed on the clamping member, said first clamping surface being oriented substantially perpendicular to said second clamping surface.

22. (New) The clamping tool of claim 19, wherein the first and second toggle joints each comprise two joints that together form an angle having a vertex that points away from the clamping member when the bar system is in the initial position.

23. (New) The clamping tool of claim 19, wherein the first and second toggle joints each comprise two joints that together form an angle having a vertex that points toward the clamping member when the bar system is in the locked position.

24. (New) The clamping tool of claim 23, wherein the angle is between about 175° and about 180° when the bar system is in the locked position.

25. (New) The clamping tool of claim 19, wherein the bar system comprises:

- a first swivel connection for pivotally connecting a first end of the activation bar to the base;
- a second swivel connection for pivotally connecting a first end of the rocking bar to the base, the second swivel connection located nearer to the clamping member than the first swivel connection;
- a third swivel connection for pivotally connecting a second end of the rocking bar to the clamping bar;
- wherein the first toggle joint includes:
 - a first joint having a first end pivotally connected to the clamping bar via a fourth swivel connection, the fourth swivel connection located farther from the clamp member than the third swivel connection, and a second end pivotally connected to the activation bar via a fifth swivel connection; and
 - a second joint comprising the portion of the activation bar that extends from the fifth swivel connection to the first swivel connection;
- further wherein the second toggle joint includes:

a first joint having a first end pivotally connected to one of the group consisting of the rocking bar and the clamping bar via a sixth swivel connection, and a second end pivotally connected to the activation bar via a seventh swivel connection, the seventh swivel connection located nearer to the clamp member than the first and fifth swivel connections when the bar system is in the locked position; and

a second joint comprising the portion of the activation bar that extends from the seventh swivel connection to the first swivel connection.

26. (New) The clamping tool of claim 25, wherein the third swivel connection and the sixth swivel connection coincide.

27. (New) The clamping tool of claim 25, wherein the sixth swivel connection is located on the rocking bar between the second swivel connection and the third swivel connection.

28. (New) The clamping tool of claim 19, wherein the first joint of the first and second toggle joints has a substantially U-shaped cross-section.